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Magazine

Your Balance Sheet

Silicone Magic

Silt Threatens Our Dams

Want To Buy a Kinkajou?

Hollywood's Competitor

August, 1954 • 35c

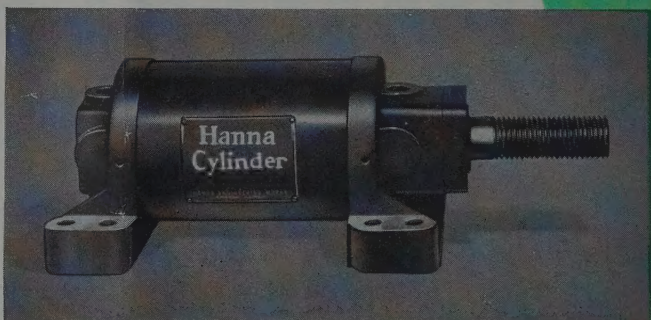
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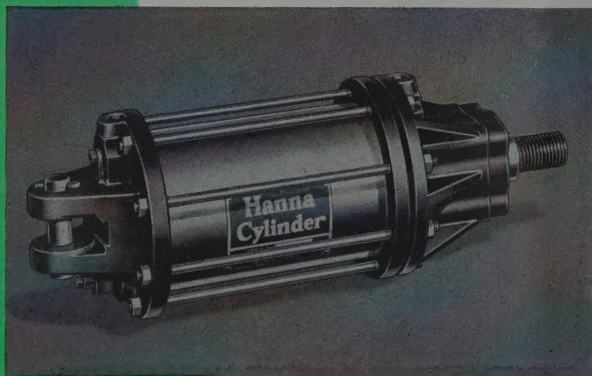


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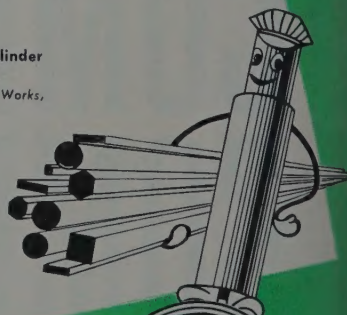
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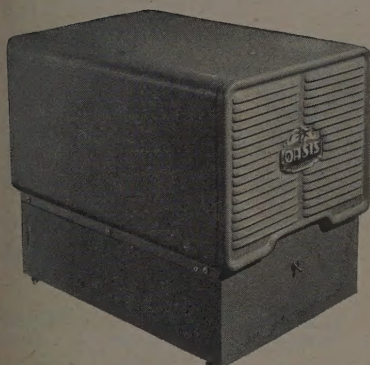
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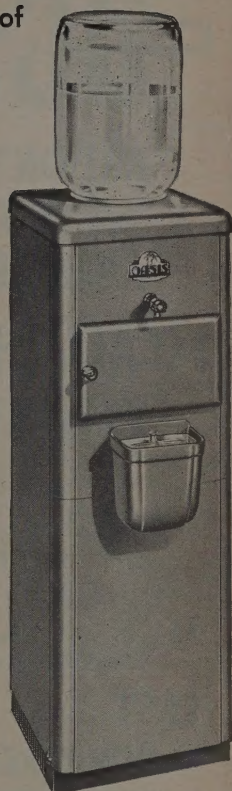
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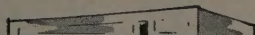
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statistics of...

Chicago Business

	June, 1954	May, 1954	June, 1953
Building permits _____	974	1,061	1,2
Cost _____ \$	16,919,300	\$ 29,653,150	\$ 21,342,9
Contracts awarded on building projects,			
Cook. Co. _____	2,751	2,849	2,0
Cost _____ \$	59,294,000	\$ 78,147,000	\$ 40,084,0
(F. W. Dodge Corp.)			
Real estate transfers _____	8,910	7,509	7,8
Consideration _____ \$	6,779,820	\$ 4,928,324	\$ 7,051,0
Bank clearings _____	\$ 4,113,920,646	\$ 3,927,206,515	\$ 4,122,604,6
Bank debits to individual accounts:			
7th Federal Reserve District _____	\$23,524,000,000	\$22,025,000,000	\$23,702,000,0
Chicago only _____	\$12,072,234,000	\$11,565,255,000	\$12,097,194,0
(Federal Reserve Board)			
Midwest Stock Exchange transactions:			
Number of shares traded _____	1,561,495	1,426,000	1,095,2
Market value of shares traded _____ \$	54,610,651	\$ 50,546,898	\$ 38,276,3
Railway express shipments, Chicago area _____	850,157	799,655	1,001,7
Air express shipments, Chicago area _____	59,474	55,556	59,5
L.C.L. merchandise cars _____	17,603	16,876	18,4
Electric power production, kwh _____	1,421,770,000	1,338,293,000	1,385,904,0
Industrial gas sales, therms. _____	12,723,316	12,501,393	14,350,2
Revenue passengers carried by Chicago			
Transit Authority lines:			
Surface division _____	44,523,614	44,929,956	48,481,2
Rapid transit division _____	9,062,460	8,921,990	9,205,8
Postal Receipts _____ \$	11,625,234	\$ 11,279,794	\$ 10,945,3
Air passengers:			
Arrivals _____	352,725	328,370	310,8
Departures _____	374,041	336,239	322,9
Consumers' Price Index (1947-49=100) _____	117.3	117.3	11
Receipts of salable livestock _____	382,302	378,751	424,1
Unemployment compensation claimants,			
Cook & DuPage counties _____	97,721	96,467	28,9

September, 1954, Tax Calendar

Date Due	Tax	Returnable to
1	Second installment of 1953 Real Estate taxes becomes delinquent on this date and subject to penalty of 1% per month thereafter	County Collector
15	If total O.A.B. taxes (employer and employee) plus income tax withheld in previous month exceeds \$100, pay amount to	Authorized Depositor
15	Illinois Retailers' Occupation Tax return and payment for month of August	Director of Revenue (Illinois)
15	Third installment (5%) of 1953 Federal Income Tax by Corporations	District Director of Internal Revenue
15	Payment of one-quarter of 1954 estimated tax found due March 15, or one-third of the balance of 1954 estimated tax found due June 15. (Those required to file declaration for first time, or making revised declaration, pay one-half of the balance of 1954 estimated tax)	District Director of Internal Revenue

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Magazine

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Ian Sturdy, Editor • Gordon Rice, Advertising Manager • Gordon Ewen, Associate Editor

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in this issue...

Balance sheets aren't getting the attention they deserve, writes Roy A. Foulke of Dun and Bradstreet. They're chock-full of information vital to the future of your business, if you'll take the trouble to look beneath the surface. Foulke's article (page 13) tells what to look for in six major balance sheet items.

...

There's a rugged new type of rubber today. Heat it to 500 degrees and it won't become gummy. Freeze it at 120 below and it won't become brittle. The secret is contained in silicones, a man-made chemical whose future is virtually unlimited. Phil Hirsch's article starts on page 15.

...

It's one of the least publicized federal problems, but Department of Interior officials are concerned about the rate at which the reservoirs behind the nation's great dams are filling up with silt. If this is allowed to continue over an extended period, the water storage capacity of some of the biggest will be lessened to point of uselessness. John L. Kent (page 16) explains how the government is trying to meet the problem.

...

Besides being home for 160 million humans, the United States has several other impressive populations. These include 26.7 million cats, 22.6 million dogs, 9.4 million parakeets, and 5.9 million canaries. A hundred years ago our goldfish population was nil; now it is between 30 and 50 million. All of which, as Charles Keysor's article (page 18) points out, means a booming U. S. pet industry.

...

Although it lacks the big stars and glamor of Hollywood, Chicago still ranks as a film capital and one of the biggest at that. It has the biggest educational and industrial film producers and the nation's biggest equipment manufacturers. Even cinema-scope films can be produced here, according to Cyrus Lloyd's article that starts on page 20.

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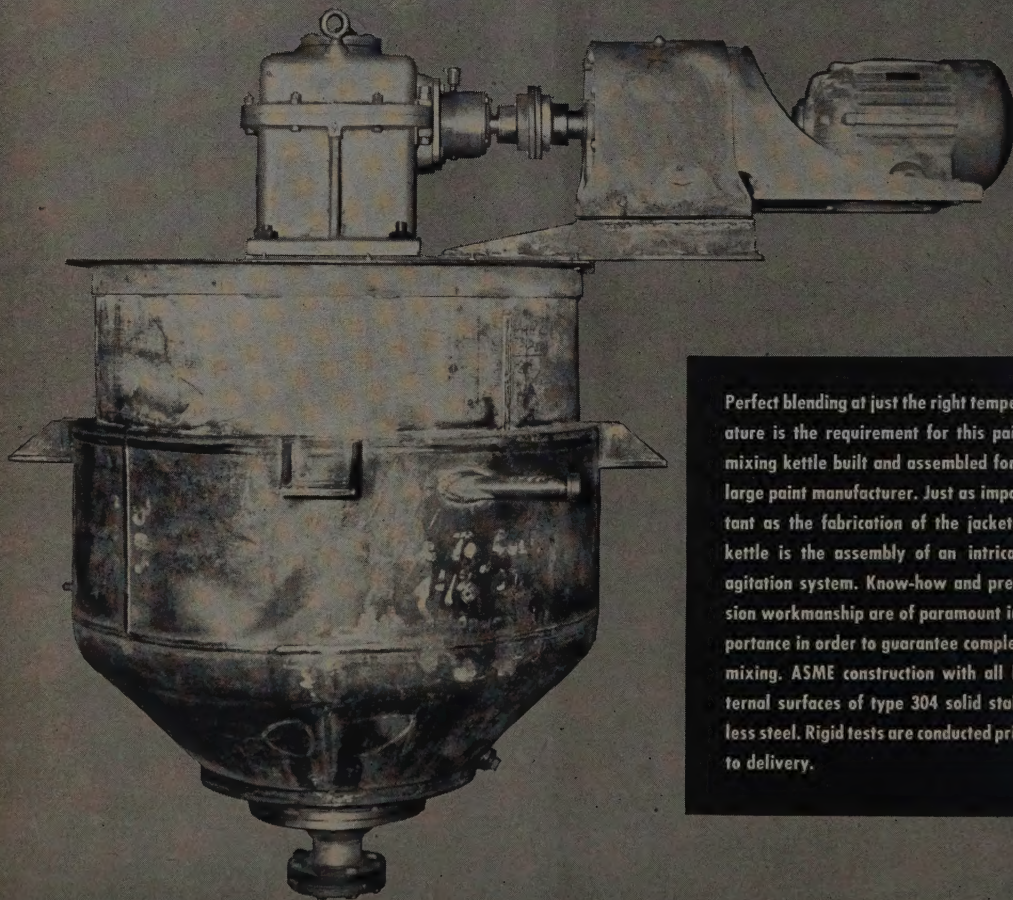
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The Editor's Page

Grass Roots Redevelopment

The \$26 million Hyde Park housing project—already approved by the city council and awaiting approval at State and Federal levels—is not an ordinary slum clearance effort.

The plan would have the Chicago Land Clearance Commission acquire two tracts totaling 50 acres, demolish 209 dilapidated buildings of Victorian vintage, and resell the land to private developers who would build modern housing units and a new shopping center.

What differentiates the project from other slum clearance efforts is that the blight lies in the center of an otherwise desirable area. In the words of the South East Chicago Commission, a citizens group that is the moving force behind the plan, it offers the chance “to use slum clearance not only as a tool for removing blight, but also as a device for enhancing and reinforcing a stable surrounding area.”

The tract boundaries were drawn irregularly to take in those areas whose need for renovation was the most desperate. In one tract, 95.6 per cent of the buildings are classified as “dilapidated,” and in the other the dilapidation rate is 98.3 per cent.

About \$6 million in tax money would be required to purchase and clear the land. Private investors would be expected to put around \$20 million into the area's redevelopment.

Only in recent years has it been recognized that the prevention of future slums, through conservation of the best features of aging neighborhoods, is fully as important as the eradication of existing slums.

The Hyde Park project in a single blow strikes at both current and future slums. It is a bold conception and deserves strong support from civic-minded Chicagoans. One of the most encouraging aspects is that its progress to date is the result of the initiative of citizens and organizations within the affected area itself.

As the president of the Chicago Association of Commerce and Industry—Arthur T. Leonard—says, “It may well become a model for similar urban renewal action in other sections of the city.”

Loyalty Can Be Divided

Industrial workers can be strongly loyal both to their unions and the employers for whom they work. This view, which probably will startle both militant

unionists and non-unionists, is advanced by Dr. Lois R. Dean of the New York State School of Industrial and Labor Relations at Cornell University as a result of studies of the problem of dual loyalty at three New York factories.

In an article on union activity and dual loyalty written for the “Industrial and Labor Relations Review,” published by the Cornell School, Dr. Dean challenges the “common sense” opinion that a factory worker who supports his union is likely to be a mal-content or “sore-head,” whose allegiance to the union springs from dissatisfaction with company policies and practices. “Evidence is accumulating,” says Dr. Dean, “to suggest that a union's main support may come from the workers who are satisfied, not dissatisfied, with the treatment they receive from management.”

Dr. Dean found, in fact, that the worker's attitude toward both his union and his management may be largely the result of his “set of mind.” Those chronically disposed to be dissatisfied are likely to become displeased with their leaders in the union as well as among management. Those appreciative of good leadership will acknowledge merit in both camps, where present, and give a proper loyalty to both.

These general tendencies can be sharply qualified by discordant labor-management relations, Dr. Dean finds. Where management and the union are in continuous and open conflict, dual loyalty may exist in the plant as a whole; but the union meetings may attract the workers who do not see union and management as having compatible goals, and these union members may dominate union activities. Where industrial relations are peaceful, however, or where the union-management relationship improves, the data suggest that control of the union may very well shift so that the active unionists will be those who look with favor on both management and the union.

Dr. Dean's findings are a testimony to the level-headedness of the great majority of American workers, as well as an indictment of the oversimplified idea, that workers can have but one loyalty over which union and company must continually fight.

Alan Sturdy

the Matador



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Here...There... and Everywhere

• **New Army Mule** — While it's not expected to become the new West Point mascot, a "mechanical mule" has been developed for the Army by Willys Motors and the Detroit Arsenal. Designed to transport weapons, ammunition, and food from the nearest roads over rough ground up to front-line positions, the 1954-model mule looks like a flat-bed truck equipped with an engine underneath in the rear and a driver's seat and controls extending out slightly from the front. The chassis is only 27 inches high and thus presents a poor target for snipers. Its 100-inch length and 750-pound weight make it easy to transport; it can even be dropped by parachute. Probably the most novel feature is that under combat conditions the driver can operate it while walking or crawling at the side or rear. He merely adjusts the steering wheel and column to swing close to the ground. Then he sets the speed as low as one mile an hour and walks or crawls behind.

• **More Crime Than Fire** — The increase in crime has reached a point where the average businessman can expect to suffer a crime loss before he suffers a fire loss, reports the burglary insurance department of the Lumbermen Mutual Casualty Company of Chicago. In the past five years reported store and office burglaries have increased 50 per cent and robberies have risen 90 per cent.

• **Engineers as Husbands** — Engineers — at least those who attended Illinois Institute of Technology — must be model husbands. Their divorce rate is almost zero against the national experience that one in every four marriages ends in divorce. Tech queried fifth-year classes beginning with 1929, found no divorces in the classes of 1939, 1944, and 1949, one

in the class of '29, and a two per cent rate for the class of '34. Earl Kubicek, director of alumni relations, says the low divorce rate may be due to the relatively high level of security enjoyed by engineers — or could it be that they are content to let their wives win all the arguments?

• **Domesticated Acid** — Hydrochloric acid has been domesticated and its corrosive action is available to take the ring out of your bathtub and clean your kitchen sink. Hercules Powder Company of Wilmington, Del., says that newly developed "inhibitors" — chemicals added to low concentrations of the acid — protect metal surfaces while permitting the acid to remove dirt, rust, scale, and discoloration.

• **Bank Contest** — The recent experience of the Bank of the Manhattan Company indicates that shedding the cloak of conservatism can be profitable. Bank of Manhattan's recent new business contest for employees was the first of its kind among major New York banks. In a three-month period it brought it 42,199 new accounts totaling \$28,693,000. The increase over the same period in contestless previous years amounted to 350 per cent. Top prize was 10-day trip to Bermuda for two, and other prizes covered every conceivable form of merchandise from dishrag to pianos.

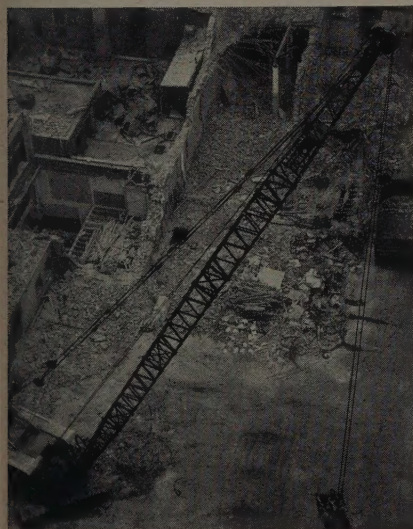
• **Keeps Paper Moving** — Paper work can't pile up at Westinghouse Electric Corporation's new warehouse in East Pittsburgh, Pa. A conveyor belt has been installed to keep it moving automatically. The idea is an adaption of an old idea — the 19th century drygoods store overhead basket. Westinghouse has two

(Continued on page 35)

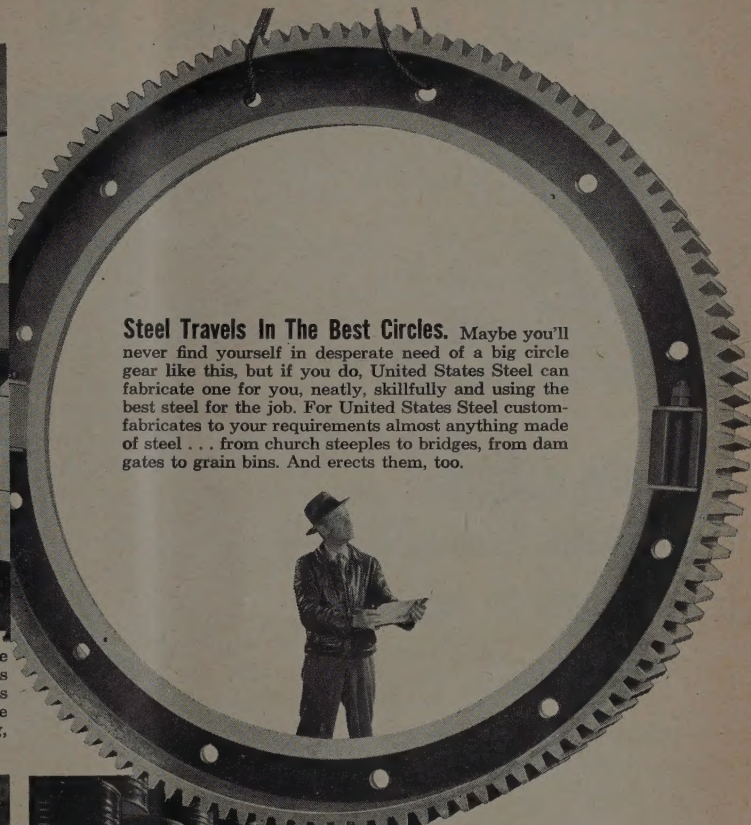
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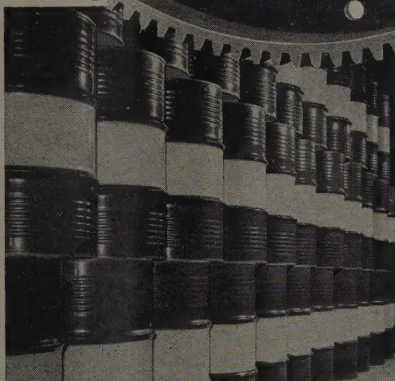
Here's A Lucky Lady. She not only owns a fine collection of pots, pans, cutlery and kitchen tools made out of beautiful, corrosion-defying stainless steel, but she also has the good fortune to be able to do kitchen chores at an easy-to-keep-shining, sanitary sink of USS Stainless Steel!



Hurricane Damage? No, this demolition job is being done on purpose . . . to make way for some new, modern buildings in a large eastern city. But whether buildings are going up, or being torn down, most of the "burden" is carried by the wire rope with which the big cranes, hoists and diggers are strung. It has to be strong, tough, reliable . . . and it is, when it's USS Tiger Brand Wire Rope.



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Trends ... in Finance and Business



• **Coffee Break Survey**—The company that doesn't allow office help to take rest periods or coffee breaks is becoming increasingly rare on the Chicago scene. Of 170 firms surveyed by the Office Management Association of Chicago, 128 have regularly scheduled breaks in the work routine and 23 allow employees to take time off informally. This leaves only 19 firms that fail to turn 'em loose.

Seven companies go to the extreme of serving coffee at the employee's desk. Two-thirds allow 15 minute rest periods twice a day, and 10 per cent grant 20-minute periods.

Despite their general tendency to grant rest periods, Chicago employers are reported as being far from unanimous on the merits of the practice. Some said it improved employee morale; others said the benefits were nil.

Meanwhile, Mills Industries of Chicago has come up with a new 500-cup, coin-operated coffee machine that has the ultimate personal touch: control levers that permit the drinker to select the exact amount of cream and sugar desired and to control strength by adding more or less hot water.

• **Better Than Pittsburgh**—Steel plants in the Chicago Metropolitan Area aren't celebrating their production record for the first six months of 1954. They turned out 8,934,900 net tons, a decrease of 15 per cent from the same period last year.

But compared with Pittsburgh, the Chicago drop looks modest. Plants in metropolitan Pittsburgh produced 8,934,900 tons in the first half, off 25 per cent from last year. Steelmen attribute Chicago's relatively better showing to the fact that the Midwest is a steel deficit area—more steel is consumed here than is

produced—and that in periods when national demand slackens Chicago's strategic location becomes a greater factor.

• **Top Job Openings**—Latest straw in the business wind is the "Executrend" survey, creation of Heidrick and Struggles, a Chicago firm specializing in finding executives for business and industry. Executrend is a count of the number of high ranking positions offered each week through display (not classified) advertisements in the weekend business and financial sections of major metropolitan newspapers.

The average number of "top brass" jobs open averaged 233 a week during the first half of 1954. The fact that the second quarter showed a drop of only 14 per cent from the normally peak first quarter is interpreted meaning that general business sentiment is on the rise.

Most of the current bright opportunities are in the engineering and sales fields, says Heidrick and Struggles. The demand for executives in marketing, selling, and finance is off slightly, but the need for personnel administrators is up. All categories except manufacturing rose in June, which is often a month of downturn in executive openings.

• **Big Year for Municipals**—The municipal bond business is in the middle of what appears to be its biggest year yet. Halsey, Stuart and Company's recent survey reports that first half sales nationally totaled a record \$3.7 billion—larger in fact than sales for the full year 1951 or any prior year. The unsold supply in the hands of bond houses at June 30, including some bonds carried over from 1953, is reported

(Continued on page 37)

GAS at work for Chicago's Industry



Spraying enamel on steel parts used for kitchen cabinets and wardrobes at the plant of the Marvel Metal Products, 3843 W. 43rd Street, Chicago.

Freshly enameled parts emerging from gas-fired drying oven on their way to the assembly area.

One of the many new postwar plants erected on Chicago's southwest side is that of the Marvel Metal Products. Manufacturers of steel kitchen cabinets and wardrobes, this company enjoys a coast-to-coast distribution.

Hundreds of cabinets and wardrobes are fabricated at this plant each day. It takes 20 minutes for the steel parts to complete the enameling cycle and gas has proved to be the ideal fuel for baking on the enamel finish.



Don't Ever Neglect Your Balance Sheet

By **ROY A. FOULKE**

It's brimming with the information you need to set policies that will prevent future financial trouble

ABOUT 25 years ago the balance sheet began to take a back seat to the income account as the most important financial statement. Under this trend, a fairly close estimate of periodic earnings has come to be considered more important than the nature and size of the assets and liabilities of a business.

Despite this continuing "de-emphasis," there are two basic reasons why the balance sheet has unique importance to the executive who is interested in determining sound financial policies:

1. I have yet to run across a businessman who did not have a fairly intimate knowledge of his income account.

2. Knowledge of the healthy distribution of assets and liabilities in a balance sheet often prevents a financial problem from arising and then getting into the income account sometime in the future.

Six items in the balance sheet can become too large for the health, wealth and prosperity of an indus-

trial or commercial business. These are: (1) receivables, (2) inventory, (3) fixed assets, (4) current liabilities, (5) funded liabilities, and (6) the most ubiquitous of all items which centers around investments in and advances to subsidiaries and affiliated companies, and advances to officers, directors and employees. There is one item in the balance sheet which can become too small for the health of a business. That item is the net working capital, the difference between the current assets and the current liabilities.

Items To Watch

Here are some things to keep in mind about the first six balance sheet items:

Receivables — Many failures and voluntary liquidations each year are brought about by heavy losses on receivables. Beginning last summer, we have entered a period of normal everyday, keen competition that will separate the men from the boys. We have had fifteen years of hot-house economy and almost constant inflation. Bad debt losses have been at a minimum over these years. This fact is widely recognized by those whose business experience runs back into the Twenties and the Thirties.

Under a sound financial policy no substantial credit should ever be ex-

tended to questionable risks. Every business must sell questionable risks. It is impossible to operate today and not do so. But sales to this category of accounts should be in small or moderate amounts and be spread over quite a number of customers. We are now entering a period of our economy where losses of this nature will have a greater effect on the well-being of businesses than anytime over the past fifteen years.

Inventories — Over the past three decades quite a number of studies have appeared about business failures. Several of those studies have been issued by Dun and Bradstreet, and I have made some personally. I have read carefully all of the studies that have appeared over this period of time, and about the only information of value which I can pass on is that there seems to be an inverse relationship between wholesale prices and business failures. As prices go up failures tend to go down, and as prices go down failures tend to go up.

There would seem to be a logical explanation for this inverse relationship. There are 2,500,000 active industrial and commercial enterprises in the United States. Several hundred thousand are marginal enterprises just balancing themselves on the brink of existence. When the prices of the raw material they re-

The author is vice president of Dun and Bradstreet, Inc. The material in this article was digested from his speech before a recent meeting of the National Industrial Conference Board.

There are 4,200,000 businesses of all kinds and descriptions in the United States."

quire or of the finished products which they handle move up, it is possible to sell their products at a slightly higher price than had been anticipated and in so doing obtain an unlooked for inventory profit. That keeps many concerns in the land of living. Conversely, when prices drop it is often necessary to reduce prices below what had been anticipated in order to sell in a competitive market, and that factor often involves losses which bring on failure or voluntary liquidation.

Sales Relationship

Most managements measure their inventories by a relationship with their annual net sales. This relationship varies among different lines of business. Dun and Bradstreet has been compiling sales-inventory relationships for many years. Among the higher ratios are manufacturers of paper boxes with 9.7 times and manufacturers of confectionery with 9 times. Among the lower ratios are manufacturers of drugs with 4.5 times, manufacturers of industrial machinery with 4.5 times, and canners of fruits and vegetables with 3.4 times. Naturally, if a management can obtain a 7-times relationship when a 5-times relationship is typical for his industry, that management has a jump on competition and a more healthy, well-balanced financial condition. There is, however, a fallacy here and I can only point it out by using a few hypothetical figures:

	Sales	Inventory	Net Working Capital
Case A	\$ 500,000	\$100,000	\$150,000
Case B	1,000,000	200,000	150,000
Case C	2,000,000	400,000	150,000

As sales expand, a faster turnover of inventory must be obtained; not just the same turnover. Let us suppose there is a loss equal to 50 per cent of the inventory in the above hypothetical figures. In the Case A, the loss is \$50,000 and the net working capital becomes \$100,000. In the Case C, the loss is \$200,000 and the net working capital becomes a deficit of \$50,000, and the company is bankrupt. So the relationship between sales and inventories must be supplemented by the relationship between the inventories and the net working capital. This relationship has been computed for many lines of business but in no case should the inventory at the end of a fiscal year

be greater than the net working capital.

Fixed Assets — For every line of business activity there is a normal percentage of tangible net worth that can be invested in real estate, buildings, machinery, equipment, tools, furniture and fixtures. Studies made by trade associations, by schools of business administration, and by our own business indicate what this percentage is for various lines of business. Among industrial companies this proportion ranges from around 1 per cent for converters of cotton goods to approximately 75 per cent for large integrated petroleum corporations.

If a company has a greater percentage of its tangible net worth invested in fixed assets than is normal for its line of business, its income account will be burdened with relatively heavy depreciation charges and it will be at a competitive disadvantage. Moreover, if fixed assets are excessive a company will concurrently have a weak net working capital position and if it is handling a normal volume of sales, a top-heavy debt. Both can be serious problems. In no case should the depreciated value of fixed assets be greater than three-quarters of the tangible net worth of a business and in most lines of activity, appreciably smaller.

Liabilities

Liabilities — Likewise, an unsound financial condition develops with excessive current liabilities and with excessive funded liabilities. No business ever became financially involved without incurring top-heavy liabilities which then could not be met on time.

The heavy liabilities might have come about through carrying heavy inventories, which in liquidation involved losses; by acquiring top-heavy fixed assets with a resultant weakening in net working capital; by acquiring other assets such as investing in and financing subsidiary organizations, assets which subsequently became frozen.

Experience in analyzing many thousands of balance sheets in virtually all lines of industrial activity, in good times and poor times, has indicated that a business tends to become vulnerable when (1) its current liabilities exceed three-quarters of its tangible net worth, and (2) if

there is a funded debt of any nature, when that funded debt exceeds the net working capital of the business.

Investments in and Advances to Subsidiaries and Affiliates — Funds invested in subsidiaries and affiliates and advances made to subsidiaries, affiliates, officers, directors and employees tend to reduce the net working capital of a business. That is actually so to the extent that investments are permanent and to the extent that advances are increased from year to year and become frozen. Such situations seem to be increasing in number and to present serious situations.

Big Turnover

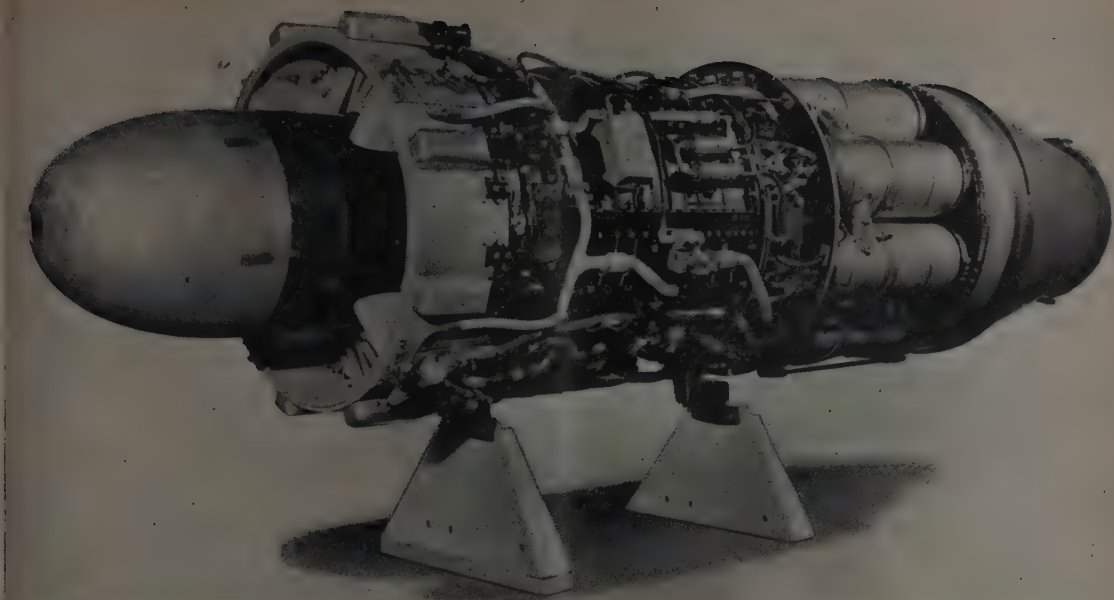
Adequate net working capital is absolutely essential for the sound operation of any business and very careful consideration should be given to any policy which impairs the excess of current assets over current liabilities. The unfortunate part of investing in subsidiaries and affiliates, and making advances to subsidiaries, affiliates, officers, directors and employees is that the original investment or advances often are small. Then they seem to grow from year to year until the management suddenly awakens to a situation which should never have been allowed to arise.

There are 4,200,000 businesses of all kinds and descriptions in the United States and, as I have mentioned, 2,500,000 are industrial and commercial concerns. New York State has the largest business population. California is second. Ten years ago California ranked fourth.

We have a tremendous turnover of businesses in the United States. There is no place on the face of the earth where it is as easy to go into business and as easy to go out of business as in our country. In recent years between 350,000 and 400,000 concerns have been liquidated each year. That does not include businesses where control has been sold to new hands and to that extent also represents a new enterprise if not a new entity. If successions of this nature are taken into consideration our annual "ins" and "outs" would be between 550,000 and 600,000 businesses.

During the past 15 years of our hot-house economy with almost con-

(Continued on page 24)



Silicone rubber is used extensively in the heating and anti-icing systems of modern aircraft.

General Electric photo

SILICONES — INDUSTRY'S HANDYMEN

FOR several weeks now, Chicago TV audiences have been treated to an unusual commercial—a man who appears in front of a brand-new car and proceeds to set the fender on fire.

The man isn't crazy. He's merely trying to sell a new auto polish containing silicones, another of the chemical wonders introduced during World War II that is making good in peacetime. Fire is only one of many things silicones will stand up against, and auto polish is but one of thousands of new uses that have been found for these man-made chemicals, which go Mother Nature one step further. In fact, as one expert put it: "Name almost any industry, and it's almost sure to have a use for silicones."

If you took high school chemistry, you probably remember that there are two kinds of chemical elements—organic and inorganic. Silicones combine the two. Silicones are a mix-

No matter what a plant makes, it could find a use for them, says a Dow-Corning official

By

PHIL HIRSCH

ture of inorganic silicon (the basic element in glass) and organic carbon compounds (found in such things as gasoline and plastics).

The value of silicones lies in the fact that they retain the best properties of both inorganic and organic substances. Like glass, silicones are good insulators, are resistant to heat and cold, don't absorb moisture, and don't combine with most other chemicals. But like organic compounds, silicones can be processed into watery liquids like gasoline, into solids as rigid as the most rigid plastic, and into just about any state

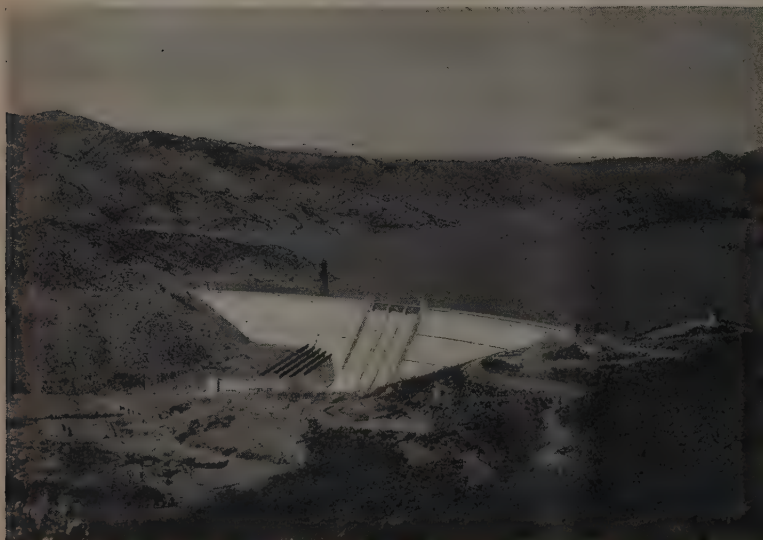
in between, including such substances as oil, grease, resin, or rubber. In each case, the silicone product has far greater stability than any carbon compound can possibly have.

You can see this clearly by comparing silicone rubber with natural rubber. The physical characteristics of the former are unaffected by prolonged exposure to temperatures ranging from as low as -120 degrees Fahrenheit to as high as 500 degrees Fahrenheit. The temperature range of natural rubber, generally, is from

(Continued on page 25)

Silt Threatens Our Dams

Reservoirs are filling up at a rate that has government officials worried



Shasta Dam is one of many with sediment trouble.

By

JOHN L. KENT

SOME of our dams are getting no damn good," a government engineer remarked recently while discussing the rapid silting of many big reservoirs in the West.

That's the situation that has government engineers staying up nights trying to think up "good" excuses they might have to make to Congress if there is any investigation of the problem.

When our engineers dammed up the rivers to make reservoirs they didn't realize how much water-borne silt would be dammed up too. The silt builds up the bottoms of the reservoirs until their capacity to hold the original amount of water is considerably lessened.

There are more than 8,400 dams and their reservoirs in the United States. According to the federal government, their value is conservatively estimated at \$2 billion.

At least one-fifth of the number, the biggest ones, representing three-

quarters of the total investment, depend solely upon storage for their usefulness. When their storage capacity is gone as a result of silting, they are of little value.

Just Awakening

The necessity of making provisions for reservoir silting is only now being recognized by engineers. But engineers have kept a watchful eye on the loss of water storage in various reservoirs for a number of years.

Elephant Butte Reservoir in New Mexico, for example, has lost 16 per cent of its capacity in 25 years.

Guernsey Reservoir on the North Platte River has lost 21 per cent in 12 years, and the Cucharas Reservoir in Colorado 35 per cent in 25 years.

The silting or sedimentation of reservoirs is not a new problem. In the early days of the West, pioneers diverted irrigation water directly

from streams. They found that when small earth dams were built across the streams to hold back the water, the small reservoirs created frequently were completely filled with sediment in a matter of weeks.

As larger dams were built, some chiefly for storage of water, rather than diversion, the necessity of the storage area to remain at full capacity became more important. A reservoir for electric power purposes must hold enough water to supply peak demands at a time when rainfall may not be enough to replenish it.

A Bureau of Reclamation engineer in Washington gives this background for the government's concern over silting:

"In 1909 we completed the Laguna Dam on the Colorado River. It was then regarded as a major diversion dam and cost \$2 million. It was 13 feet high, 4,844 feet long, and raised the water surface 10 feet. Water was backed up for about 10 miles."

Then he added:

"In less than a year, the basin created by this dam had been filled with sediment. This started us thinking."

The "thinking" led to investigations by a dozen government agencies in addition to the Bureau of Reclamation. Little by little the "facts of life" on suspended matter in water, its uncanny proclivity to settle out of the water behind dams,



Desilting works on the All-American Canal in California.

and other hydraulic data were collected.

By 1948 engineers knew enough about the phenomenon so that they could make a big investigation of a major reservoir. In one of the most elaborate scientific surveys ever made, engineers of the Department of the Interior and the Navy teamed up to measure the sedimentation of Lake Mead. This lake is the world's largest artificial body of water. It was created when Hoover Dam was built across the Colorado River.

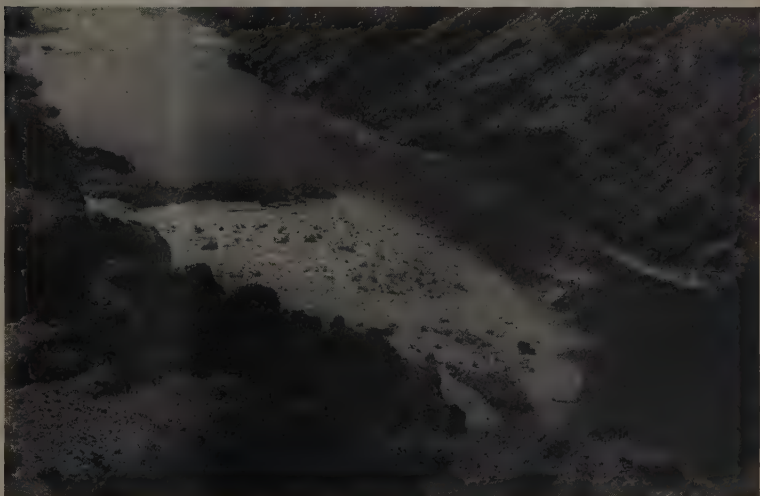
Supplies Los Angeles

The Hoover Dam hydroelectric plant is the largest electric producer in a reclamation project and supplies power to Los Angeles and other southwest areas.

A miniature fleet of power boats was transported by the Navy overland to the shores of Lake Mead. With the boats and equipment came Navy Ordnance Bureau officers, and technicians from the Navy's Electronics Laboratory and Underwater Sound Laboratory.

Technicians with the joint survey were interested chiefly in the rate at which sediment was accumulating in the reservoir. Blueprints and land maps used during construction of the dam gave the original bottom contours and heights of the land.

To find what changes had occurred in the bottom since the start of storage in the reservoir, a picture



The Colorado River has been called "too thin to plow and too thick to drink."



This government survey measured sedimentation on Lake Mead.

(Continued on page 38)



Mutual affection society.

U. P. photos

Want To

By

CHARLES W. KEYSOR

tional pet fanciers buy all sorts of strange and exotic creatures.

"If it swims, crawls, walks or flies, somebody—or probably thousands of people—keep it for a hobby," advises one veteran pet wholesaler.

Reptile collecting is perhaps the most bizarre of all pet specialties. Amateur herpetologists keep everything from boa constrictors to crocodiles. One Chicago collector, for example, had twenty-two kinds of snakes in his basement. All went well until a box fell through the cage screen one day and ten reptiles escaped. None were dangerous, luckily, and one by one the hobbyist rounded up his strange pets. He found them coiled in tool boxes stretched on rafters.

Still another collector — a lizard fancier — used to enjoy feeding chopped meat and raw eggs to his Gila Monster, a poisonous lizard native to the southwestern U. S. He had a collar for the reptile and used to take it walking through the house.

National magazines recently told the story of another pet fancier — one who bought a baby lion because it looked so cute. Intelligent and playful, it made a wonderful pet until the beast outgrew the house. Finally the owner gave his lion to a zoo, but not until after strangers in the neighborhood had been scared out of their wits by the sight of a lion walking the streets.

Anybody who wants to can buy a boa constrictor for five dollars a foot, a de-scented skunk for \$40, a turtle for forty-nine cents or a Scarlet Macaw for \$150. Also carried in the inventories of some dealers: King of the jungle (a variety of monkey), \$2

IN 1856 P. T. Barnum made a trip to Europe. His mission: to search the Continent for oddities that might interest people in the United States.

Traveling through France Barnum was intrigued by bright yellow fish which he saw swimming languidly in the fountains of several large estates. They were known as "goldfish," Barnum learned. The first specimens had been imported more than a century before by the notorious Madame de Pompadour, mistress of Louis XV.

Barnum, whose shrewd eye never passed up a money-making possibility, brought a few goldfish back to America. People saw them, were intrigued as Barnum had been, and clamored to buy fish for their own homes. Along with the fish, merchants sold bowls, feed and other

miscellaneous supplies in ever-increasing amounts.

Today there are 30 to 50 million goldfish in the U. S. Raising and merchandising them has reached such proportions that even P. T. Barnum would be amazed to see what he had started.

Keeps Up With Goldfish

America's pet industry has grown apace with the goldfish business, which is just one part of the whole. A survey made by *All-Pets* magazine gives the surprising information that America harbors no less than 26.7 million cats, 22.6 million dogs and 9.4 million parakeets. Canaries number 5.9 million and dealers report sales of about 100,000 monkeys a year. Baby turtle sales reach 3 million annually, while less conven-

Buy Your Family a Kinkajou?

Or would they prefer a boa constrictor at \$5 a foot? Your pet shop can deliver almost as much as Noah's Ark

Ocelots (a small leopard), \$85; and King Vultures, \$50. The list available to pet fanciers includes practically every species that rode out the flood aboard Noah's Ark.

The person purchasing a pet has started himself on a continuous buying campaign. The tropical fish fancier, for instance, can easily spend \$75 for his original setup, including aquarium, stand, thermometer, air pump and fish. As long as he keeps his collection he will keep buying such items as seaweed (which may cost \$40 per plant), shells, new fish, and packages of "fresh frozen water eas." Buying a bird is but a preliminary to the purchase of cages, toys, feed, cuttlebone, medicines, and phonograph records for teaching parakeets how to talk. Monkey fanciers buy antibiotic drugs to cure their pets of colds.

For cats and dogs there are baskets, muzzles, sweaters, curry combs, flea powder and worm pills. Food is probably the biggest item in this field, however. Nobody knows exactly how many horses end up each year on the dinner plates of the nation's 49-odd million cats and dogs, but the U. S. government reports that in one month its inspectors checked some 23.7 million pounds of animal food!

Bootlegged Lizards

Surprisingly enough, lizards are — or rather were — sold by the hundreds of thousands. In fact, so many chameleons were exported from Louisiana that the state legislature recently passed a law prohibiting their shipment. It seems that the

(Continued on page 22)



Three foxes and friend.

Some people treat baby squirrels like a baby.



Lemurs have big appetites.





Scene from literature appreciation film made by Chicago's Coronet Films.

ALL MOVIES DON'T COME FROM HOLLYWOOD

By **CYRUS LLOYD**

YOU may never see a camera crew and a glamorous star "on location" around Chicago. Nonetheless, the city has developed

into one of the world's major film capitals.

In many respects, it surpasses Hollywood, traditionally the motion pic-

ture center of the world. But where Hollywood's product is predominantly 35-millimeter entertainment features, Chicago's is 16-mm educational or industrial films. In addition, the equipment industry also centers in Chicago. Literally, you can have your entire production from studio to screen and in cinema scope and stereophonic sound, too, made in Chicago.

Seldom will you see a Chicago product, equipment aside, in the comfortable surroundings of a theatre. Usually it will be seen in a sales meeting, an employee training session, a group discussion, or in a classroom where the students may be using film in anything from biology through history, with vivid side excursions into sociology and political science.

It's all part of the growing use of films in literally all situations. About one-third of all American schools have the necessary basic audio-visual equipment; more than 5,000 companies regularly use film in training, sales, and public relations, some with budgets as high as \$500,000 per film. The army currently shows 93 million man-hours of film annually—and so the story goes. Film can accomplish ends quickly and easily, and with an identical presentation on repetitive showings. It can show the lengthy metamorphosis of a butterfly or the hidden operation of an engine valve in ten minutes. It can give widely separated groups of people the same interpretation of an event or a message.

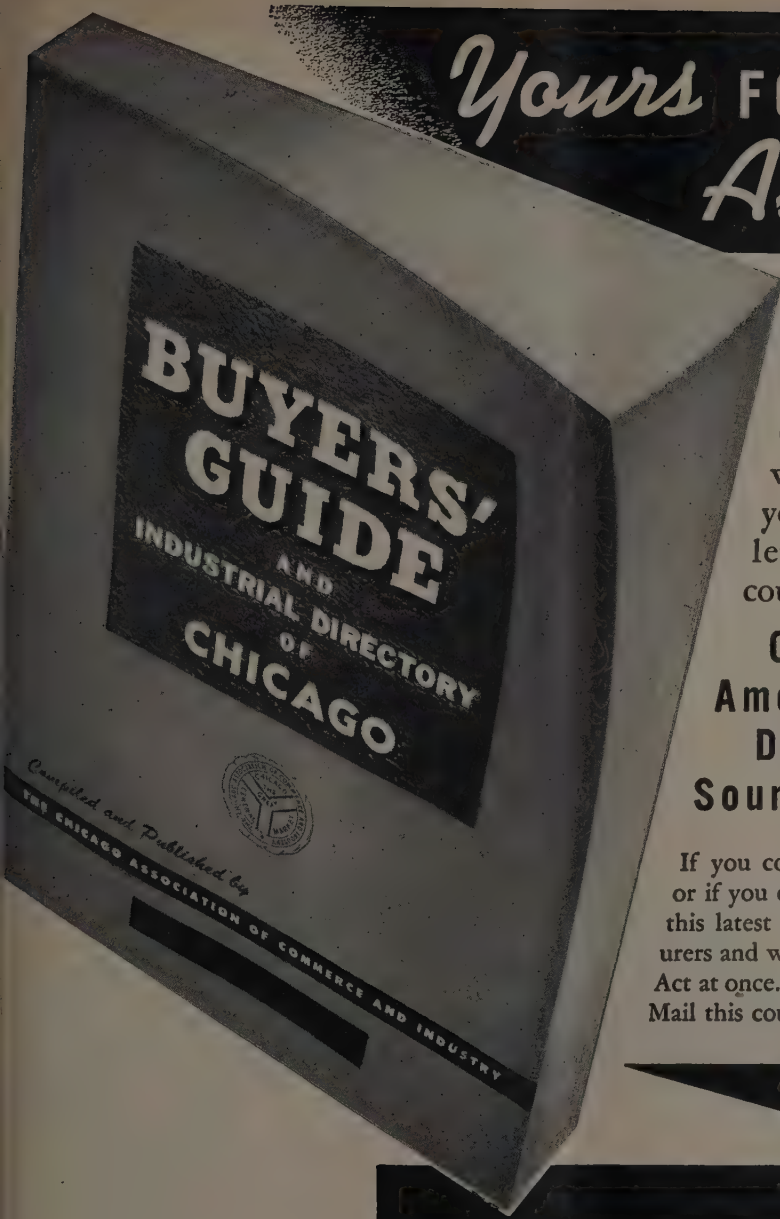
If you want to talk in superlatives, the "biggest" of everything is in

(Continued on page 30)



The change in plowing is portrayed in Encyclopaedia Britannica Films' 16-mm movie, "Productivity, Key to Plenty."

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Want To Buy Your Family a Kinkajou?

(Continued from page 19)

state's chameleon population had been depleted to the point where Nature's balance was upset and harmful insects were getting out of hand.

This development gave rise to the practice of bootlegging chameleons — a little-known species of criminality which has not, as yet, been investigated by Congress or blamed upon any underworld syndicate.

Likewise, a ban on the export of baby alligators by the State of Florida has resulted in some bootlegging, according to those in the know.

Both these restrictions have practically removed the once-popular reptiles from pet shop display cages. One wholesaler who used to buy 10,000 mealworms at a time for chameleon feed, now has discontinued this line.

There are some 8,000 retail pet shops scattered about the country plus an unknown number of drug, hardware and department stores that sell pets or pet supplies as a sideline. Business mortality in the pet shop field is high. Many people who are enthusiastic hobbyists enter the field thinking it will be an easy way to make money.

"Nothing could be further from the truth," says John Krause, proprietor of Chicago Heights Pet Food and Supplies. "You've got to know and practice all the fundamental small business operations. On top of this, you've got to know enough about pets to advise your customers what to do when their goldfish begin developing fungus and their canaries stop singing.

"One more thing — you aren't dealing with inanimate merchandise; part of your inventory is alive. You have to watch temperature, food and water supplies night and day."

Like other small businessmen, the pet shop operator has to promote constantly. One of the best gimmicks is displaying unusual fish and animals to attract customers. One Chicago retailer kept a lively monkey in his window. Its antics drew crowds of people — many of whom patronized the shop. De-scented skunks, ocelots, bright colored parrots and tanks of tropical fish are often used for this purpose. To get crowd-stopping displays, one ingenious pet shop owner in Richmond,

Va., got to know a transcontinental airlines pilot, who shipped many curious birds and animals to him from South America.

Dogs and cats can be a real problem to the shop that fails to sell them while they're still puppies or kittens. When they get beyond the lovable baby stage, they become much harder to sell and have expensive appetites.

Goldfish are grown by the tens of thousands in special hatcheries. They are shipped to wholesalers in tank trucks or in smaller lots by railway express. Freight charges for shipments by rail are one and one-half times the regular first class rate. This covers the cost of an attendant who rides with each railroad shipment to feed and change water en route.

"We only lose about one-tenth of one per cent of each shipment," advises Rudy Kostyal of the Auburn-dale Goldfish Company of Chicago, an organization that wholesales some 500,000 goldfish and 100,000 baby turtles a year.

Tropical Fish

Most tropical fish are raised commercially in Florida or southern California hatcheries. Shipping problems are like those in the goldfish business, but now and then special arrangements are made to bring fish all the way from the tropics. Nowadays, tropical fish can be shipped thousands of miles in a plastic bag containing a large bubble of air which sustains them en route. One dealer in Java recently sent several hundred tropicals all the way to Germany. The loss was a mere two per cent.

Fish are marked up 100 to 150 per cent by the retailer, and other pets also yield a sizable profit margin. "This isn't out of line," explains one wholesaler, "when you consider that you're dealing with a live commodity on which you can't get insurance."

In the tropics animal dealers ply regular routes on jungle rivers catching specimens or buying them from native trappers. Stock is then sent by air or ship to the United States, where it is held in inventory by special dealers who advertise

their exotic wares in various trade journals. Thus, when your neighborhood pet dealer gets a request for a suckling chimpanzee, a cobra or a white swan, he knows exactly whom to contact.

One of the pet industry's biggest current headaches stems from the importing of parrots and parakeets. These birds are subject to psittacosis or "parrot fever," a deadly virus which attacks humans and domestic fowl. To curb the spread of this disease, Federal authorities recently outlawed the importation of birds capable of carrying it. But the parakeet market has been so lucrative that contraband birds are being smuggled across the border from Mexico. Last winter, San Diego police caught two men who pleaded not guilty, even though one man's home contained 600 illegal parakeets. Tests showed several of the birds were carrying the highly infectious virus.

Outbreaks of parrot fever have caused alarm in some cities, and here and there local health authorities have tried to stop the sale of all birds. In Texas there was a much publicized outbreak which involved

63 poultry packing house workers. Four died. Stories like this present the pet industry with a grave public relations problem.

Some dealers have tried to meet this menace by issuing health certificates with every bird sold. No doubt parrot fever and the resultant bad publicity have, to some extent, caused the slump in parakeet sales this last year. Another factor, according to Petman Krause, is that the market is nearing the point of saturation.

Gold Mine for Chains

Pets of the more common types have been a gold mine to the chain stores. Kresge's, Woolworth's, Neisner Brothers, W. T. Grant and other chains find birds, fish and turtles highly profitable.

"Ever notice that the pet department is always located in the back of a chain store?" asks L. G. Wills, a Kresge store manager for 24 years. "The pets draw customers through the entire store and we have found that sales in our other departments increase as a result."

Wills was one of the first mana-

gers to discover the value of pets in chain store promotion. In an effort to boost the volume of business in his LaSalle, Ill., store, Wills ordered 1,000 goldfish back in 1946. He advertised in the local paper that one would be given to each customer as long as the supply lasted on the coming Saturday.

"You should have seen the line of people waiting when we opened the store that morning," recalls Will. "It was a regular mob! We got rid of all those fish in a couple hours. Sure, we gave away the goldfish. But we sold most of the people bowls, shells, sand and seaweed, not to mention ice cream, shoe laces, books and items from every other department in the store."

According to Rudy Kostyal of the Auburndale Goldfish Company, goldfish are being used in a variety of ways that would have gladdened the heart of promotion-conscious P. T. Barnum.

"The other day we got a call for 150 bowls of fish to be used as Sunday School attendance prizes," says Kostyal. "We know, too, that many doctors are prescribing goldfish watching as a pastime for people



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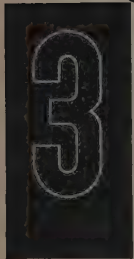
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convalescing from rheumatic fever. These same dentists, doctors and even psychiatrists are putting fish in their waiting rooms.

Auburndale markets turtles to many petshops, and Kostyal takes obvious pleasure in telling how the businessmen in one Midwestern city raised money for the local schools by conducting a turtle race. Each businessman bought a turtle for five dollars. After much publicity in the local press and radio, a race was held. All proceeds were used to help the schools.

There are many other instances which illustrate the kind of imaginative marketing and promotion techniques being used in the pet industry. Wholesalers and retailers who think up new angles do very well, indeed.

Oddly enough, there is no established nationwide trade association to help dealers and wholesalers with their many specialized problems. However, certain specialists have banded together to carry out promotions such as Cat Week, National Cage Bird Week, and, of course, Dog Week. These are usually co-sponsored by pet shops and local cat and dog and bird lovers' societies.

The alert shop owner never misses a chance to deepen his customers' interest in birds, fish, and animals. In some instances this amounts to instruction in Nature study, with the dealer telling his customers what sort of wild life they may find in the national parks and other vacation spots. Many dealers also help their customers photograph favorite pets.

This sort of things leads naturally into diversification, which the progressive pet shops find very profitable. For example, when business slows in the summer, alert pet shops board parakeets, canaries, dogs, and cats whose masters go away on vacations. To cash in on the fishing mania, a few shops make use of their know-how with fish to stock a supply of minnows. One pet shop in Indiana got so many night calls for bait that the partners had to sleep in alternate shifts.

Ingenuity in merchandising, plus a friendly crackerbarrel relationship with customers, are the retail pet dealer's most valuable assets. His business is built upon the idea of selling quality merchandise that provides a continuing market for his goods and services.

Don't Neglect Your Balance Sheet

(Continued from page 14)

stant inflation we have averaged 7,179 business failures with losses to creditors, annually. That is not a large number of failures per year. For the preceding 15 years, from 1924-1938 inclusive, we had an average of 19,739 business failures, annually. Today, there are 50 per cent more businesses in existence than in 1938. In other words, prior to the inauguration of our inflationary economy, we averaged more than two and one-half times as many failures on two-thirds as many active businesses as we have today.

Failures for the first five months of 1954 have run 34 per cent higher than the number of failures for the first five months of last year. That is due, in my opinion, less to the recession from which we are emerging than to the new period of intense everyday, but normal, competition which we are now entering.

In conclusion, I would again emphasize the importance to business executives in a thorough understanding and knowledge of the bal-

ance sheet and the healthy distribution of its assets, liabilities, and investment. The great majority of corporations which have become financially embarrassed or which have little or no profits, arrive there as a result of one or a combination of six unsound financial policies. These six unsound financial policies are:

1. The unwise extension of credit in large amounts to very questionable risks.

2. Carrying inventories which are out of proportion to net working capital as well as out of proportion to net sales, a policy which often leads to substantial losses as prices fluctuate downward or due to obsolescence.

3. Carrying an excessive investment in fixed assets, that is, in real estate, buildings, machinery, equipment, tools, furniture and fixtures.

4. Incurring a top-heavy debt structure of current liabilities or current and long-term (funded) liabilities.

5. Extension of top-heavy loans to

officers, directors, employes, subsidiaries or affiliated organizations or investments in such organizations.

6. The payment of excessive salaries and dividends.

When definite fixed guides, based on a sound understanding of the relationship of important balance sheet items, are determined and then adhered to conscientiously, most critical financial problems will be forestalled from arising in the first place. That is where sound financial policies play their part. Critical problems are prevented from arising. If one does not over-invest in fixed assets, he cannot have a top-heavy fixed asset position with its accompanying problems. If one does not speculate in inventories, he cannot have a top-heavy inventory position with its accompanying problems.

Many businesses are operated and many management decisions are made on what appears will give the maximum of immediate profits. Let me suggest that the most successful businesses are those where management decisions are based on policies which will give, not the maximum of immediate profits, but the maximum of profits over the years. There is a tremendous difference between the bases of these two broad operating philosophies.

Silicones

(Continued from page 15)

20 or -40 degrees to 250 or 300 degrees.

When things get too hot, natural rubber loses its bounce, becomes gummy and adheres to any metal that happens to be nearby. Often, the sulphur and chlorine in the rubber will corrode the metal.

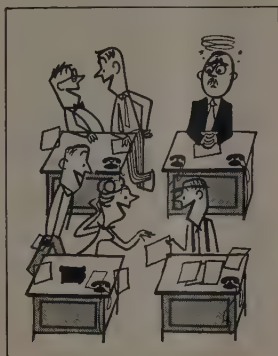
The turbo-supercharger connections on diesel-electric locomotives are one place where the need for a rubber that can take high temperatures has been met by silicones. Silicone-rubber gaskets used in these connections remain flexible and stable in temperatures of around 300 degrees. Door seals on ovens encounter similar heat. For a long time, industrial oven makers have used silicone rubber seals. Now, the material is going into kitchen ranges. And on chemical processing machinery, silicone-rubber gaskets have replaced asbestos (which had tempera-

ture stability but lacked resilience). Gaskets used in steam irons and radiator pressure relief valves also are being manufactured from silicones.

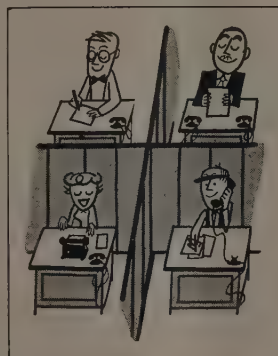
Silicone rubber has replaced natural and synthetic rubber at several points in automobile and aircraft engines. Silicone "O" rings are now used in the fluid drive systems of all the autos made by one major manufacturer. Ordnance transmissions also use silicone rubber seals because these seals are immune to the corrosive elements in transmission

fluids and stand up well under severe operating conditions. There are literally miles of silicone-rubber glass-cloth ducting in the anti-icing and heating systems of today's aircraft. Exhaust air at pressures as high as 125 pounds per square inch, and at temperatures of more than 500 degrees Fahrenheit, are often carried in these systems. In this application, silicone rubber has been found superior to both synthetic rubber and metal.

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posed rubber becomes as hard as rock. The B-36 bomber, for example, flies at altitudes of around 35,000 feet, where the temperature sometimes gets down to 120 degrees below zero. The plane's bomb bay doors are sealed by silicone rubber strips more than 500 feet long. These seals have gone through hundreds of operating hours without deteriorating. Other types of rubber last no more than 20 hours under such conditions, according to Arthur C. Porter, one of the engineers who helped design the plane. "It is doubtful if the B-36 now would be as highly efficient if it had not been for the development of silicones," Porter said.

Silicone electrical insulation beats about anything developed to date. For a long time, electrical manufacturers have been able to pack more power per pound into their product, thanks to the ability of silicone insulation to stand up under high operating temperatures. General Electric, for example, produces a 200-amp, 50 per cent duty cycle, 58-volt welding transformer which is accommodated in the frame size previously used for a 180-amp, 20 per cent duty cycle, 44-volt unit.

On electric cable, silicone rubber provides extra protection. If it does burn, it leaves a non-conducting layer of silicone dioxide bonded to the wire. Because of this feature, silicone insulation has been wrapped around electric cables on several ships, where, in a serious fire, it could prevent the vessel from being gutted.

Silicone sprays are applied to bushings on high-tension lines. The bushings keep the power in the lines from reaching the steel towers and short-circuiting.

The high arc resistance of silicone-impregnated plastics makes them useful for switchboxes and other kinds of electric terminals. Arc-resistance tests have shown that on installations where a conventional phenolic plastic breaks down in three seconds, silicone-glass plastics will stand up for 200 seconds.

Small, liquid-filled capacitors and transformers require resilient bushings which provide a positive seal, yet will not contaminate the liquid.

Silicones have been used extensively to coat metals subjected to high temperatures. Within the past few years, the new chemical has

made it possible to substitute ordinary sheet steel for stainless steel or smokestacks, space heaters, mufflers and stoves. The former metal sells for about one-tenth the price of the latter. Unaided, ordinary steel won't take the heat generated in these installations. But, coated with a silicone-aluminum paint, it will not deteriorate after prolonged exposure at temperatures of up to 750 degrees Fahrenheit.

Non-Sticking Qualities

The baking and plastics industry were among the first to exploit the non-sticking qualities of silicones. Today, the tire, die-casting, and packaging industries are employing this wonder chemical for the same purpose. In the metal industry, for example, once molten metal has solidified, no amount of pulling will extract it from a mold unless the mold has been lubricated. Ordinary lubricants cannot withstand the high temperatures involved. Silicones, which remain stable under high temperature conditions, have speeded production and improved the appearance of the final product. Silicones are also used as release agents on packaging machinery parts which come into contact with food or with adhesives. Silicone coatings are now applied to airplane de-icer boots and are used to separate sand shells from hot metal patterns in foundries that use the new shell-molding process.

Silicones are being used extensively in engine lubricants. The Air Force has an electric motor that charges the circuits of airplane machine guns. A silicone lubricating fluid enables the motor to operate efficiently in temperatures of more than 100 degrees below zero.

In steam generating plants, where moving parts are often subjected to high temperatures, silicone lubricants are performing a similar job. A few years ago, for example, the Dow Chemical Company built a \$1 million steam plant at Midland, Mich. Six months after the plant went into operation, trouble developed in a gadget known as a "pneumatic position regulator," which translates air pressure into mechanical movement by means of a leather piston.

The piston was lubricated with neatsfoot oil, but the high tempera-

ure of the piston chamber reduced the oil to a greasy residue and hardened the leather to the point where it had to be replaced frequently. New leather pistons were installed, this time lubricated with silicone oil. They are still operating, more than two years later.

Silicones have come to the aid of oil manufacturers wrestling with the problem of detergent additives. These detergents enable the oil to cleanse the engine as it flows through the lubricating system. But detergents have a tendency to foam, which reduces engine power. When a silicone compound is added to the oil, the foam is eliminated without affecting detergency. This foam-inhibiting ability also makes silicones a natural for use in the manufacture of rubber gloves and baby nipples. Silicones eliminate foam in the liquid latex which unchecked would cause pin holes to appear in the final products.

Long List of Uses

The list of uses is a long one. Silicones are used in "hard" auto and furniture polish to make them spread evenly, in waterproofing compounds applied to masonry walls, and in fluids which sterilize medical and dental equipment.

One of the big reasons for the increased utilization of these organic-organic miracle workers is that they have been greatly improved during the past few years by General Electric and Dow-Corning, the major producers. According to J. D. Saunier, engineer in GE's silicone products department, the tensile strength, tear strength, and elongation properties of silicone rubber have been improved from 300 to 500 per cent since 1947.

Silicone rubber and oil are available at \$3.50 or \$4.50 a pound today, compared to about \$6 for the former and \$7 for the latter five years ago. But despite this reduction, they still cost about ten times as much as organic oils and natural rubber. Saunier believes that further increases in use will narrow the price gap appreciably in the next few years.

Already, however, silicones are big business. Exact figures are closely guarded, but it has been disclosed that formulators of auto and furniture polish alone use about one mil-



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lion dollars worth of silicone compounds annually, and this is not the largest market for the chemical. The Connecticut Hard Rubber company, one of the major producers of these products, reportedly has doubled its business every year since entering the silicone field shortly after World War II.

The future of silicones is summed up graphically by Dr. R. Collings, vice-president of DuPont Corning: "Our salesmen have a big problem. When they are looking for new business they don't know where to stop. Any plant they go to no matter what it makes, could find a use for silicones."

New Applications

Several new applications are now being tested. A major glass bottle manufacturer, for example, has reduced breakage by applying a silicone emulsion to the inside of the container. According to Dr. Charles E. Reed, general manager of General Electric's silicone products department, glass and fine china soon may be receiving similar treatment.

Several new silicone water repellents for leather and synthetic fabrics are also being tested. The waxes chemical is used in about 25 percent of the waterproofing compounds on the market. The big advantage of silicones is that they do not fade away despite repeated cleanings or launderings.

Here are some of the other possible uses for silicones that are now under intensive study:

Silicone separator strips that prevent the expansion and contraction of building walls; silicone rubber tubing and molded shapes that can be substituted for human tissue in plastic surgery and internal organs; automobile tires that last as long as your car; shatterproof low-temperature resistant auto windows; steering and braking systems able to survive temperature extremes; silicone bunion pads; silicone-impregnated baby products which will reduce skin irritation; permanent, sealed-in cooling systems for automobile engines.

This list could be expanded almost indefinitely. That's another reason why "silicone" is a common word in a lot of front offices these days.



Industrial Developments

... in the Chicago Area

INVESTMENTS in industrial plants in the Chicago area totaled \$16,453,000 in July compared with \$12,348,000 in July, 1953. Total investments for the first seven months of 1954 stood at \$149,717,000 compared with \$86,545,000 for the same period in 1953. These figures include expenditures for the construction of new industrial plants, expansions of existing buildings and the acquisition of land or buildings for industrial purposes.

Sinclair Refining Company is making a major expansion of its refinery in East Chicago by the addition of a catalytic reforming unit and auxiliary equipment. The facilities will produce high octane gasoline and aviation gasoline components.

Signode Steel Strapping Company, 2600 N. Western avenue, is starting construction of the first unit of its new plant in Northfield Township on Lake avenue between Pfingsten road and the Chicago and North Western railway. Skidmore, Owings, Merrill, architect.

Pennsylvania Salt Company, Philadelphia, has acquired seven acres of land on Lincoln avenue west of Chicago Heights on which it will construct a blending plant. The first unit will contain 25,000 square feet of floor area. The plant will be used for processing maintenance chemicals for laundry and dry cleaning industries, sanitizing agents for farm and dairy units, bonding and pickling materials and acid-resisting cements.

Field Enterprises, Inc., has purchased a building at Rush street and East North Water street, which will be razed. The 15,000 square feet of land on which the building stands,

combined with 45,000 square feet adjacent already owned by Field Enterprises, will, at a future date, be the site for a new plant for the Chicago Sun-Times.

• **Wilson Laboratories**, Division of Wilson and Company, is starting construction of a new laboratory and office building at South Western avenue and 42nd street. The structure will contain approximately 14,000 square feet of floor area.

• **Columbia Pipe and Supply Company**, with two plants in the Chicago area, one in Hammond and the other at 1120 W. Pershing road, is expanding the Pershing Road operation by the addition of 25,000 square feet of floor area. The addition will be a one-story and mezzanine structure designed by A. Epstein and Sons, Inc. Poirot Construction Company, general contractor.

• **Schulz and Hirsch** division of Serta of Chicago, bedding manufacturer, is erecting a 32,000 square foot addition to its factory. A. Epstein and Sons, Inc., engineer; Fred Teitelbaum, general contractor.

• **Spraying Systems, Inc.**, Bellwood, is adding 25,000 square feet of floor area to its plant. The company manufactures industrial and agricultural spray nozzles. Olsen and Urbain, architect; the Cook Company, general contractor.

• **Ratner Manufacturing Company**, maker of a diversified line of chemical products, has purchased the 30,000 square foot building at 2735 N. Ashland avenue. William Kaplan, broker.

• **L. C. Kohlman, Inc.**, 724 W. Washington street, is building a sheet metal shop at 1801 N. Paulina

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street. Campbell-Lowrie-Lautermilch Corporation, general contractor.

• **Comet Die and Engraving Company**, 123 S. Laflin street, is erecting a 14,000 square foot plant at 1150 N. Cicero avenue. Continental Construction Company, general contractor.

• **Burgess-Norton Manufacturing Company**, Geneva, is making an addition to its plant which will provide room for additional grinding facilities. The company manufactures automotive parts, screw machine products, etc.

• **Steel Mill Products Company**, 176 W. Adams street, is starting construction of an 8,000 square foot warehouse, factory and office building at 5675 N. Elston avenue. Morton L. Pereira and Associates, architect.

• **Sauerman Bros., Inc.**, 522 S. Clinton street, is erecting a new building at its plant in Bellwood which will house the company's office facilities. The structure will con-

tain 11,000 square feet of floor area. The company manufactures earth moving equipment and cable clamps. J. L. McConnell and Associates, architect.

• **Easy Plating Company**, 1125 S. California avenue, has acquired a two-story building at 4858 W. Lake street for expanded operations. J. J. Harrington and company, broker.

• **Culligan, Inc.**, manufacturer of water softeners and supplies, is expanding its plant in Northbrook. City Wide Builders, general contractor.

• **Quality Machine Service**, 2343 W. Belmont avenue, is erecting a plant at 3515 N. Kenton street. The plant will contain 6,000 square feet of floor area. The company does automatic screw machine and lathe work.

• **Ayerst Laboratories** was reported in this column last month as purchasing a plant at 3435 N. Knox avenue. Louis B. Beardslee and Company, industrial realtor, was broker in this transaction.

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Movies

(Continued from page 20)

Chicago — the biggest education producers, the biggest industrial producers, and the biggest equipment manufacturers. Chicago is ringed with production companies which compete vigorously and successfully on the basis of their work and lower costs.

Trade sources estimate that production of equipment here, including screens and sound equipment, grosses close to \$50,000,000 annually, about half the national total. The largest manufacturers in the field are Chicago firms, including Bell and Howell, Ampro, S.V.E. (one of the pioneers), Revere, Webster Magnecord, Radiant Screen, Dali and others.

In film production, Chicago has both the largest educational and the largest industrial producers. Nationally there are more than 200 educational film companies operating, but two, Encyclopaedia Britannica Films, Inc., the Wilmette subsidiary of the book company; and Coronet Instructional Films, Inc., an Esquire subsidiary, divide between 60 and 70 per cent of the \$15 million school market.

Both these firms are in constant production, but because of the nature of their films they operate on smaller budgets and slower return than do comparable industrial producers. Each offers more than 50 titles, mostly one-reel, on subjects ranging from the life cycle of an insect to vocational guidance and social science.

Development Leaders

Both have been leaders in new developments designed to expand the markets as well as to enhance the educational values of their productions. EBF, for example, has pioneered the use of color and "1/2 sync" sound in the classroom. Both are constantly pushing into new curriculum areas where film has not been previously used.

Chicago also has one internationally-known producer whose work bridges the difference between educational and industrial films — John Nash Ott, Jr., who gave up a banking career to parlay a hobby into

profession. He began experimenting with time-lapse photography in his high school days, laboriously exposing film one frame at a time at stated intervals to get a motion picture of an entire growing cycle of a plant. Today his elaborate studio in Wilmette produces footage used by Disney in Hollywood, in educational films, and in industrial and scientific productions. He has even made dancers dance in rhythm to a Russian waltz by taking time-lapse of their turnings toward light and synchronizing the resulting footage with the music.

Commercial Films

Somewhat different is the pure commercial film, made to present a point of view or to advertise a given product. In this field, Chicago studios are busy and leading. One proper, Wilding Pictures, recently completed the first commercial time-lapse production made for a commercial client. Wilding is well equipped for any sort of Hollywood production. It operates in one of the historic spots of the film industry, the Essanay studios on Argyle, where John Beery, Gloria Swanson, and other stars of yesteryear got their start before the entertainment branch of the industry moved to California.

But Wilding is not the only Chicago firm operating in an historic spot. Kling Studios, busy remodeling the roller rink on West Washington Boulevard into a studio, recently bought the old Chaplin studios in Hollywood, complete with the props and ghosts of famous productions like "The Kid," "City Lights," and others. All told, there are 51 producers in Chicago, although less than half are significant in terms of continued operation.

Chicago industrial firms are prominent among film users. One, International Harvester, helped pioneer the field when it inaugurated its program way back in 1911. Swift, Armour, Inland Steel, Hotpoint, and many others, and a good many others use film consistently, effectively — often expensively.

Once film costs \$1,200 per minute of screening time in black and white and \$1,500 in color, at a very rough guess, it is easy to understand why they insist upon quality. They put it in that famous "Chicago."

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Transportation and Traffic



THE Illinois Intrastate Motor Carrier Rate and Tariff Bureau, Inc. has petitioned the Illinois Commerce Commission to prescribe minimum rates and charges for for-hire motor carrier transportation in Illinois. The petition attacks the dual operation of common and contract motor carriers as well as the rates, tariffs and schedules of the carriers. The minimum rate request would include movements of household goods, bulk commodities, farm-to-market products, grain, feed and fertilizer. The Illinois Territory Industrial Traffic League, in its reply to the petition, pointed out that many of these highway carriers operate interstate as well as intrastate and that there is no minimum rate order in effect on interstate traffic. "It is difficult to conceive," the League said, "that conditions among the carriers could be going smoothly interstate while presenting such dire emergency intrastate as is alleged." In answer to the motor group's allegation that state revenues will suffer because of fewer purchases of license rates unless a minimum rate order is adopted, the league said that "it could be at least as sound to suggest that such state revenues will suffer most heavily if a minimum rate order is adopted for in that event the motor carrier traffic will be diverted to other forms of transportation on which the rates are not held up in the manner that petitioner seeks for motor carriers." The league concludes that a general investigation with a blanket minimum rate order is "fundamentally contrary to the public interest because the effect of such a proceeding is to destroy competition and deny to management its right to exercise initiative and managerial discretion to operate its own business."

Mixed Carload Rule to Mountain Pacific Territory Effective Au-

gust 2: New mixed carload rules for movements from, to and within Mountain Pacific territory will become effective August 2, 1954, on not less than 15 days' notice. The new rules will be published in compliance with the report of the Interstate Commerce Commission in No. 30994 in which the railroads were ordered to establish the modified Classification Rule 10 (mixed carload rule) within Mountain Pacific territory, and between that territory, on the one hand, and Western Trunk Line and Southwestern territories, on the other. On movements between Mountain Pacific territory, on the one hand, and Official and Southern territories, on the other, the commission ordered establishment of the so-called streamlined Rule 10 on eastbound traffic and the modified rule on westbound traffic. The difference between the streamlined and modified rule is that under the latter, so-called "all freight" rates cannot be used in rating a mixed carload shipment. Under both the modified and streamlined Rule 10 the charges on a mixed carload shipments are based on the rate applicable to each article in the shipment and the minimum weight is the highest provided for any article in the shipment. Under the Classification Rule 10, which is presently in effect on movements from, to and within Mountain Pacific territory, the charges on a mixed carload shipment are based on the rate applicable to the highest rated article and the minimum weight is the highest provided for any article in the carload.

• **Eastern Railroads Publish Volume L.C.L. Rates:** A tariff has been filed with the Interstate Commerce Commission by the eastern railroads naming volume rates on less carload shipments, effective August 1, 1954. The tariff is No. E-178 published



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• **President Appoints Cabinet Committee on Transport Policy:** President Eisenhower has established a Cabinet Committee on Transport Policy and Organization with the Secretary of Commerce, Secretary of Defense and Director of the Office of Defense Mobilization as members and the Secretary of Agriculture and the Director of the Bureau of the Budget as *ad hoc* participating members. In a letter to Secretary of Commerce Sinclair Weeks, who has been designated as chairman of the committee, the President said, "Over the past years, studies have been made and recommendations have been presented regarding government programs affecting particular segments of the transportation industry. Following the recommendations of the original Hoover Commission on Government Organization, considerable progress has been made in the past five years in the centralization within the Department of Commerce of major programs affecting transportation. However, a comprehensive up-to-date review of over-all transportation policies and problems is needed as an aid in assuring the over-all consistency of government policies and programs concerning particular branches of the transportation industry. Also, the organization of the federal government to cope with transportation problems should be reviewed." The President's letter continues, "The exploration and formulation of policy and organizational recommendations covering the whole field of transportation require a broad perspective which comprehends the over-all needs of the nation and understands the spe-

cial problems and capabilities of forms of transportation. To meet this need, therefore, I am establishing a Cabinet Committee on Transport Policy and Organization whose task will be the presentation of recommendations for my consideration." The committee's recommendations must be submitted to the President not later than December 1954.

• **Ask I.C.C. to Continue Chicago Switching District Rate Order:** In response to a "show cause" order, a group of 36 railroads has asked the Interstate Commerce Commission not to vacate and set aside its order of July 3, 1933 which directed that the rates and charges for intrastate switching service in the Chicago Switching District within the states of Illinois and Indiana be not higher than the interstate switching rates and charges applicable within the district. "By virtue of the commission's orders," the railroads said, "interstate and intrastate switching rates have been maintained on the same level for the past 20 years to the apparent satisfaction of the shippers and receivers of freight, as well as the carriers. From time to time in order to meet competition or for other reasons, the carriers have petitioned and received modification of the commission's orders with respect to specific commodities moving between certain points within the district. The orders, therefore, have not prevented adjustments to meet the changing needs of shippers and carriers." Continuing, the railroads stated that they are "unanimous in their belief that these orders have prevented and will continue to prevent the return of an undesirable or treble basis of rates within the district with the attendant discrimination resulting from differential charges on two classes of traffic inextricably intermingled and carried on in the district under substantially the same conditions."

• **Senate Approves Winchell Nomination to I.C.C.:** The Senate has confirmed the nomination of John H. Winchell of Colorado to membership on the Interstate Commerce Commission, for a term expiring December 31, 1960. Commissioner Winchell, who was chairman of the Colorado Public Utilities Commission, will succeed former

Commissioner James K. Knudson, signed.

I.C.C. Lifts Suspension of "Biggy Back" Tariffs: The Interstate Commerce Commission has vacated suspension of tariffs published by eastern railroads naming rates for transporting freight in highway trailers on flat cars. The commission will, however, continue its investigation of the subject, assigned asocket I. & S. 6214, Trailers on Flat Cars—Eastern Territory, and provided with the hearing scheduled for July 27 in Washington, D. C.

Here, There and Everywhere

(Continued from page 8)

veyors that hold papers together under pressure. One carries shipping orders from the third-floor office to packing areas; the other hustles bills-lading from traffic men on the third floor to the first-floor loading dock. An average of 200 shipping forms are handled hourly.

Pellet Pavement — The bottleneck that has prevented widespread use of rubber-asphalt topping for roads appears to have been broken by a synthetic rubber pellet smaller than a pencil eraser. The pellets, developed by their developer, the United States Rubber Company, make every asphalt plant in the country a potential rubber-road mix plant. Tossed into a mixing mill, the unvulcanized pellets break down in 60 seconds, spreading rubber evenly through the mix. U. S. Rubber previously pretreated asphalt and rubber at its Engatuck Chemical division plant and shipped the hot mixture in insulated tank cars or trucks to construction sites. This meant high transportation costs, and the shipping range was limited to a 24-hour radius. Now only the pellets are shipped. From six to 12 pounds are needed to a ton of asphalt, which will cover 13 square yards of road with one-and-a-half inch seepage-proof surface.

Spreading Color — Color television reception is now possible in 35 cities and by next year 125 TV stations should be equipped for color broadcasts, according to the Radio Corporation of America.

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New Products

For Bosses Only

With DuKane Corporation's new Flexifone intercommunicating system, the boss no longer has to sit around and be impatient when he gets a busy signal. He simply presses the "executive priority key" that cuts off the delaying conversation and connects him with the man he wants. DuKane hastens to say that the system includes warning signal flashes on the desk instruments of the interrupted parties and electrical circuiting that makes it impossible for the boss to eavesdrop before he butts in. The company's address is St. Charles, Ill.

Close-Quarter Fork Truck

Yale and Towne Manufacturing Company, Philadelphia, has introduced an electric fork truck designed primarily for operating in close quarters—such as in driving loads right up into highway vans and trailers. Its features include accessibility of the driver's seat from either side, low seat position to keep the driver's head below the 68-inch overall height at all times, and low cowl for better visibility.

Radiant-Tube Furnace

Lindberg Engineering Company, 2450 W. Hubbard St., Chicago 12, says its gas-fired radiant tube atmosphere furnace represents the first large-scale application of radiant tubes to toolroom-size furnaces. The new unit is said to be suited for heat treating virtually all production and tool steels, except high-speed, where it is essential to keep the work free of scale and decarburization. Maximum operating temperature is 1850 degrees Fahrenheit.

Sportsmen's Power Tool Kit

Even an automatic fish scaler is included in the sportsmen's power tool kit made by C-D Products, Inc., 3946 Willow Road, Schiller Park, Ill. In addition to being equipped to do the usual jobs around the house or

cabin, the kit has a round carborundum stone for sharpening hooks and knives, a vise for tying flies and holding hooks, a felt buffing and polishing wheel for shining tackle and a fibre brush for cleaning reels. The AC-DC power unit plugs into light sockets. The company says the power tool has the highest torque of any hand tool made. Price is \$19.95.

Rollers for Ranges

Designed to retail at \$12 and to make cleaning behind the stove easier for the housewife is the kitchen range roll-away, a roller device that can be adjusted to fit under any size of range. It is made by Kitchen Range Roll-Away Manufacturing Company, 1034 W. 76th St., Los Angeles 44. If you have a gas range, the company will sell flexible hose and coupling to go with the roll-away.

No-Maintenance Alarm

A fire alarm that requires no maintenance, has no batteries, wire, moving parts or springs is the product of Evergard Fire Alarm Company of Doylestown, Pa. When fire breaks out, the increased temperature sets off the Evergard which sounds a loud continuous warning on its air horn for 15 minutes. Kranz Products Company, 3502 Elston avenue, Chicago, is western distributor.

Hand Truck

Shop Caddy is the name of the two-wheel hand truck with 500 pounds lifting capacity made by Precision Equipment Company of 871 N. Milwaukee Ave., Chicago 4. Lifting height of the hydraulic unit is 36 inches. Price is \$139.50, f.o.b. Chicago.

Ceiling Air Conditioner

Ceiling-suspended air conditioners for factory and office use are being introduced by Union Asbestos and Rubber Company, 332 S. Michigan Ave., Chicago. The space-saving ceiling unit comes in sizes ranging from

... to seven and a half tons. The ... and five horsepower models ... 62 inches long, 40 inches wide, ... 28 inches high. The seven and ... half horsepower model is 72 by ... by 32 inches. Piping and electri- ... connections are brought down ... from the ceiling or can be run over ... from the wall.

Boat Owners' Companion

Boat owners should welcome the ... Raytheon Manufacturing Com- ... ny unit that serves both as a ... table radio and marine direction ... der. Called the GM 114A, the 13- ... and radio has a knob-like antenna ... t projects only two inches above ... case. By listening to the radio ... d rotating the antenna until it ... nts directly at the radio stations, ... mariner can obtain a "fix" on his ... sition at sea. The price is \$149.50, ... d maker's address is Waltham 54, ... ss.

Electric Wheel Chair

An electric wheel chair for the ... erly and handicapped is featured ... Sears, Roebuck and Company's ... and-winter catalog. The Lectra- ... can turn in its own length, pass ... ough a 30-inch opening and climb ... grade of 15 per cent. It has two ... ward speeds—four and five and a ... f miles an hour—and a reverse ... ed. Power is supplied by two 12- ... t batteries capable of three to ... r hours of continuous operation. ... e Chicago price is \$479.95. Sears' ... ess is 925 S. Homan St., Chicago.

Bonds In Finance and Business

(Continued from page 10)

Only about 5 per cent of the first ... f sales volume. ... bolstering the long-term outlook ... an expected \$10 billion of toll ... d and toll bridge bonds, the ... ns of the New York State Power ... thority to issue bonds in connec- ... n with the development of the St. ... vrence Seaway, and the accumu- ... ng need for more school, hospi- ... and water and sewer facilities. ... or four years there has been a ... rowing spread between the yields ... high grade taxable bonds and the ... ds of tax-exempt municipal is-

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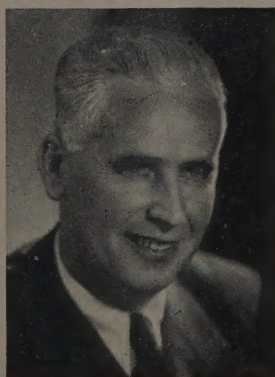
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sues, the survey points out. "Something will have to give when this fact becomes better known — and it should be in favor of the 'tax-exempts,'" it comments.

• **Home Prices Stable** — Prices of new houses generally are the same as last year with somewhat lower prices typical of more expensive homes and the same or slightly higher prices in the medium and lower cost fields, says the United States Savings and Loan League. The market for used houses is reported somewhat weaker than a year ago.

Lower priced homes are described as constituting a larger share of the total volume of new home building

than was the case a year ago. Two-thirds of the communities surveyed report a larger number of homes for sale this year.

"Residential construction, while exceeding the one-million-unit-per-year level since 1949, apparently has not yet met the requirements growing out of postponed construction during the depression plus high living standards of an expanding population," states the League. From another source, Standard Factors Corporation, comes the prediction that the million-a-year rate will hold until 1960 when there will be an upsurge due to the formation of new households by the bumper crop of babies born in the early 1940's.

Silt Threatens Our Dams

(Continued from page 17)

of the underwater topography was obtained through the use of depth sounding equipment similar to that used on naval and commercial vessels.

A specially-equipped boat made many trips across the reservoir, receiving sound waves sent from the boat's "sounder" and bounced back by the reservoir bed. The time it took for the sound to travel from the boat and back indicated the depth of the water.

Underwater photographs were taken to assist in determining the

topography of the reservoir bottom. In addition, the Navy used certain as yet undisclosed, new techniques of "underwater television."

Some of the engineers' fears were realized when the figures were collected and analyzed. Silt was being deposited in the reservoir at an annual rate of 105,000 acre-feet a year. An acre-foot means an area of one acre, one foot thick.

These deposits of 105,000 acre-feet per year actually total 2,210,000 acre-feet in the 20 years that the dam has been operating. Since the total storage capacity of Lake Mead is 31,000,000 acre-feet, the 2,000,000 acre-feet of silt means that the reservoir has already lost one-fifteenth of its capacity in just 20 years. Reservoirs and dams of the Hoover Dam type are built to last generations and even centuries. It is a sure bet that Hoover Dam at least won't be useful during its planned life unless something is done. The dam would be useless for all practical purposes when it is half filled with silt. And, that won't be too long from now, relatively speaking. Some engineers think that the dam could become practically useless by the end of this century.

The joint survey found information which will be applicable to doing something about the Hoover Dam and other dams having similar difficulties. So far, no absolute solution to the silting problem has been offered.

Interior Department officials plan

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ome hope on smaller dams which are expected to be built upstream of the large dams and which would catch some of the silt, and prevent it all from building up behind the big dams downstream.

In the immediate future it may be necessary to build "de-silting" works on some rivers just ahead of the reservoirs similar to those already in operation on some irrigation dams and canals in California.

The de-silting basin on California's Laguna Dam is an example of a local method of reducing the amount of silt carried into an irrigation system. A rectangular settling basin 116 feet wide, 800 feet long and 18 feet deep is provided. The water intended for irrigation approaches the canal head at a velocity as low as one foot per second, which causes the heavier particles of sand and soil to drop to the floor of the basin.

About every three days it is necessary to raise the gates at one end of the basin and flush out these deposits, which are then carried back into the river below the dam.

De-silting Works

In addition to settling basins, there are mechanical de-silting works. One of these works is located at Imperial Dam, about five miles above Laguna Dam. The works here were designed on the same principle as used in the Laguna basin—that heavier particles will fall out of suspension if the water is slowed down. Rotating "water plows" churn up the water, slowing it down.

The de-silting basins and mechanical works are effective if the particles are large enough to drop out quickly, but with large quantities of fine material it is often impossible to hold the water long enough. In such instances, chemicals like sulfate of alumina or ferrous sulfate are added to coagulate the suspended matter. But even when the chemicals are not harmful to crops, the expense of this method generally makes its large-scale use impracticable.

Engineers are now looking to the only other alternative. That is, not letting the silt get behind the big dams in the first place.

In the closing days of the 1953 session of Congress, the legislators appropriated \$5 million toward a

program that eventually may help keep our giant hydroelectric and irrigation dams from becoming as useless as buggy whips to car drivers.

The \$5 million was given to the Department of Agriculture as a start on a far-reaching program of upper watershed soil conservation. With this first appropriation the department will build about 50 small dams on the upper reaches of a number of streams.

The small dams will not only hold back the soil, but prevent floods by checking the water before it becomes uncontrollable. But from the long-

range view, holding back soil and silt which is finding its way behind the dams is more important.

Prolonging the usefulness of the dams is important because we are using our non-replaceable energy resources such as oil, gas and coal at extremely rapid rates. Falling water is always with us.

But the water is of little use unless we can store it economically behind dams. And these must have a life at least long enough to repay the enormous cost of building them.

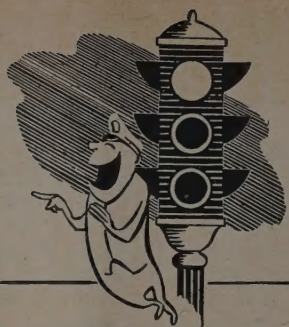
Otherwise, as the engineer said, the dams are no damn good.

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Stop me...If...



Wife: "Do you have a good memory for faces, dear?"

Husband: "Of course I have."

Wife: "That's good, I just dropped your shaving mirror."

Mabel: "Oh, Lucille, I'm sure there's a man following us."

Lucille: "Gosh, what'll we do?"

Mabel: "Let's match for him."

Customs Officer: "Look here, Mister, you told me there was nothing in the suitcase but clothing and I found a bottle of whiskey!"

Accused: "Sure, that's my night cap."

Girl: "I maintain that love-making is just the same as it always was."

Boy: "How do you know?"

Girl: "I just read about a Greek maiden who sat and listened to a lyre all evening."

A lady was entertaining the small son of a friend.

"Are you sure you can cut your own meat, Tommy?" she inquired.

"Oh, yes, thanks," answered the child politely. "I've often had it as tough as this at home."

A tramp had been arrested. Taken to the police station he was told to take a bath.

"What, in water?"

"Yes. You need it. How long has it been since you had a bath?"

"Well," he said hesitating, "I ain't never been arrested before."

She: "You admit that marriage is a fine school?"

He: "Not for a man."

She: "Why not?"

He: "Because he loses a bachelor's degree without getting a master's."

Tired after a busy day, a distinguished congressman in Washington handed the menu back to the waiter and said: "Just bring me a good meal."

A good meal was served and the congressman gave the waiter a generous tip. "Thank yo', suh," the waiter said, "an' if you' got any friends what can't read you' jes' send 'em to me."

Sign in restaurant window: "T-bone, 25c. Below in fine print is: "With meat, \$4.00."

Employer to lazy janitor: "Pulaski, I wrote your name with my finger in the dust on my desk this morning."

"Yeah, boss," the janitor replied, "and you spelled it wrong."

Middle age is when you don't care where you go, just so you're home by 9 p.m.

"This is daddy's den," a little boy told his playmate. "Does your daddy have a den?"

"No," came the reply, "he just growls around the house."

Fresh from the back country, the youngster at the recruiting officer's desk was being subjected to routine questioning. "Birth day? No, he didn't know when that was, but — he brightened — he knew how old he was, he was 32. The officer was skeptical. How did he know? Maw had told him how old he was and he had added a year at plowing time ever since.

"Well," queried the officer, "Did you work a year at spring plowing or at fall plowing?"

"Dog-gone it," exclaimed the would-be sailor, "that explains it. I thought I was getting old too darned fast!"

The teacher had asked the class to write in their opinion, the 11 greatest American men. After a while she stopped at one desk and asked:

"Have you finished your list yet, Bobby?"

"Not yet, teacher," Bobby replied. "I can't decide on the quarterback."

Three girls had grown up together. Two of them married, and thereafter continually annoyed their spinster friend with taunting remarks about her unhappy condition.

She laughed off their comments gracefully until one day they went away and she was too far.

"Now, tell us truthfully," they told her, "have you ever really had a chance to marry?"

With a withering glance, she retorted: "Suppose you ask your husbands."



"I'm leaving early tonight to make up for the fact that I'm coming in late tomorrow morning."